METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR BANDWIDTH ALLOCATION IN A MULTIPLE ACCESS SYSTEM

5   **Abstract of Disclosure**

Embodiments of the present invention provide methods systems and computer program products for allocating excess and deficit bandwidth among a plurality of queues in a multiple access system. Each of the plurality of queues is associated with

10   a quality of service and has a corresponding quantum value. An available quantum value based on a total amount of committed bandwidth on a downstream channel and a total amount of bandwidth on the downstream channel. The quantum values of each of the plurality of queues are updated by an update quantum value corresponding to respective ones of the plurality of queues. The update quantum values are based on

15   the available quantum value, a total reserved quantum value corresponding to packets enqueued in the plurality of queues for an update period and the quality of service associated with the respective queue.